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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,690	01/16/2002	Thomas C. Adams	SC 013 CIP 7	8621

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16690 Champion Forest Drive
Spring, TX 77379-7023

EXAMINER	
KOHNER, MATTHEW J	

ART UNIT	PAPER NUMBER
3653	

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/050,690	ADAMS ET AL.	
	Examiner	Art Unit	
	Matthew J Kohner	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *62-71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *62-71* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 July 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments / Amendments

Applicant has cancelled claims 41-61 and added new claims 62-71. Applicant has argued that the new claims overcome the rejections of the previous office action. Specifically, applicant has argued that the newly added step of "inserting a portion of the upstanding member into the at least one notch" overcomes the §§ 101, 103 and 112 rejection (Applicant's remarks page 5).

In regard to the §§ 101, 112 rejections, MPEP 2173.05(p) states, "A single claim which claims both **an apparatus and the method steps of using the apparatus** is indefinite under 35 U.S.C. 112, second paragraph." "Such claims should also be rejected under 35 U.S.C. 101 based on the theory that the claim is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only."

In claims 62 and 63, applicant has added a step of "inserting a portion of the upstanding member into at least one notch ..."

Here, despite Applicant's arguments that the claim is a method, it is really the relationship of the elements of the apparatus which defines over the prior art. The feature which defines over the prior art, is the notched portion in the tubular spaced-apart crossmember. Since the independent claims 62 and 63 each have a preamble which recites a method, the claims have been treated as method claims. Therefore, the claims can't rely on the structural relationship of

the elements of the apparatus as the basis for patentability. Therefore, the rejection is maintained.

In regard to the §103 rejection, Examiner concedes that the Baltzer reference does not disclose the step of "inserting a portion of the upstanding member into the at least one notch" wherein the notch is in at least one of the spaced-apart crossmembers. Therefore, the previous §103 rejection is withdrawn. However, in light of the new claim language, a new §103 rejection in view of Baltzer is made.

Drawings

The drawings are objected to because reference numeral 14, in Fig. 1B is not described in the specification. Further, reference numeral 60 (see specification Page 9, line 24) is not shown in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any

portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

Page 6, line 15: the glue is given reference numeral 131, however in drawings is shown with reference numeral 13.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 62-71 are rejected under 35 U.S.C. 101 because they are directed to neither a "process" not a "machine" but rather embrace and overlap two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted to set forth the statutory classes of invention in the alternative only

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 62-71 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 62-71 claim a method, but rely on the structural relationship of the apparatus as the basis for patentability. Therefore, it is unclear to what the claims are actually directed. As a result, the claims are indefinite.

Further, in regard to claim 62, the preamble is not commensurate with the scope of the claim. Claim 62 is directed towards a "method for heating material with a screen assembly on a vibratory separator." However, none of the steps recited in the claim even mention applying heat to the material. Instead, the method recites steps of positioning the screen on the deck and using the screen assembly.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 62-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of US Patent No. 5,967,336 to Baltzer et al.

In regard to claims 62 and 63, Baltzer discloses a method of using a vibrating screen assembly, wherein the method includes the steps of:

- positioning the frame above the deck (Col. 1, lines 15+),
- vibrating the screen (Col. 1, lines 15+); and
- feeding material onto the screen (Col. 1, lines 15+).

Baltzer does not disclose the steps of

- inserting a portion of the upstanding member into the at least one notch to facilitate correct and stable emplacement of the screen assembly on the deck,
- lowering the frame onto the deck with the portion of the upstanding member in the at least one notch.

Yet, Applicant submits in the specification that Cobra shale shakers are commercially available (Applicant's specification, page 3). Further, that these Cobra shale shakers have a bed/deck with an upstanding member projecting above the bed or deck (Applicant's specification, page 3). Further, that without a notch in the tubular crossmember, the screen will be prevented from laying flat on the deck of the shale shaker (Applicant's specification, page 3).

It is well known that known in the art to position the screen so that it is stable (see e.g. Baltzer who discloses a notch/clip (22) which he provides to "mate with the vibrating screen machinery" [Col. 3 ,lines 38+]). If one of ordinary skill in the art were using a shale shaker with an upstanding member rising from the deck which would prevent the screen from laying flat, merely providing a notch in the screen to mate it with the upstanding member would obvious.

In regard to claim 64, Baltzer discloses a method for using a screen assembly on a vibratory separator, the screen assembly having non-flat areas of screening material thereon, the non-flat areas of screening material between lines of glue,

• gluing together a plurality of layers of screening material (Col. 1, lines 50+),

the plurality of glued-together layers of screening material secured to a frame (Col. 1, lines 52+), the frame comprising:

two ends (18 and 20), each end connected to and spaced-apart by one of two spaced-apart sides (14 and 16), the two spaced-apart sides including a first side and a second side and the frame including

a plurality of spaced-apart cross-members (40,42,44,46,48,50), each cross-member extending from the first side to the second side,

the method comprising:

• mounting the screen assembly on a vibratory separator (Col. 1, lines 15+), the vibratory separator located in an environment at an ambient temperature,

• vibrating the screen assembly with the vibratory separator for a period of time (Col. 1, lines 15+),

• feeding material to be treated onto the screen assembly (Col. 1, lines 15+).

Baltzer does not specifically disclose the temperature of the material to be treated, nor the period of time the material is on the screen assembly. However, Examiner notes that the limitation of claim 43 wherein, "the period of time of such a temporal length and the material temperature of such a temperature to effect flattening of the non flat areas of screening material" is very broad. Further, it would be obvious to one of ordinary skill in the art that known shale

shakers such as Baltzer et al. would vibrate the drilling mud at such a temperature for such a period of time.

In regard to claims 65-66, it is well known in the art that drilling mud can reach temperatures of several hundred degrees (See paper[1] submitted with previous office action, especially Fig. 5).

In regard to claim 67, Baltzer discloses that the vibrating shakers are used at oil well drilling sites (Col. 1, lines 27+) and that the mixture of materials is fed on the top of the screen assembly (Col. 1, lines 18+).

In regard to claim 68 and 69, Baltzer does not disclose using cured moisture-curing hot melt glue to glue together the plurality of layers of screening material. Rather, Baltzer discloses using epoxy (Col. 2, lines 55+). It would be obvious to one of ordinary skill in that art to use another adhesive such as glue to secure the plurality of layers together. Examiner notes that applicant has argued that "[m]oisture-curing hot melt glue is different from such epoxies in both structure, use, and in results achieved in a screen assembly." However, Examiner does not contend that the glue and epoxy are the same. Examiner merely contends that the use of the moisture curing hot melt glue would be obvious to one or ordinary skill in the art in light of the teachings of Baltzer.

Further, the limitation of the glue being "applied in a pattern" is very broad and is not further defined in the specification. Baltzer does not specifically disclose how the epoxy is applied. However, it would be obvious to one of ordinary skill in the art that the adhesive could

[1] Prediction of Formation Equilibrium Temperature while Drilling based on Drilling Mud Temperature: Inverse Problem using Trough2 and Wellbore Thermal Model.

be applied in a particular, replicable, way (i.e. a pattern) rather than just merely applying adhesive haphazardly and differently in each screen produced.

In regard to claim 70, Applicant discloses in the specification at page 7, that the tubular frame may be of "hollow or solid beams, tubes, bars, or rods of metal ..." Baltzer discloses that sides and the end are composed of extruded aluminum material (Col. 3, lines 35+).

In regard to claim 71, Baltzer does not specifically disclose that the plurality of layers include at least a lower layer of coarse mesh and at least one layer of fine mesh. Instead, Baltzer merely discloses a multiple layers of wire screen cloth (Col. 1, lines 50+). However, it is well known in the art to use at least a lower layer of coarse mesh and at lease on layer of fine mesh (See e.g. US Patent No. 5,417,793 to Bakula, Col. 9, lines 1-15).

Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Baltzer '336 in further in view of US Patent No. 6,439,392 to Baltzer et al.

In regard to claim 70, Baltzer '392 discloses that the members are tubular.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kohner whose telephone number is 703-305-8496. The examiner can normally be reached on Mon-Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 703-306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew J. Kohner
Examiner
Art Unit 3653

mjk

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